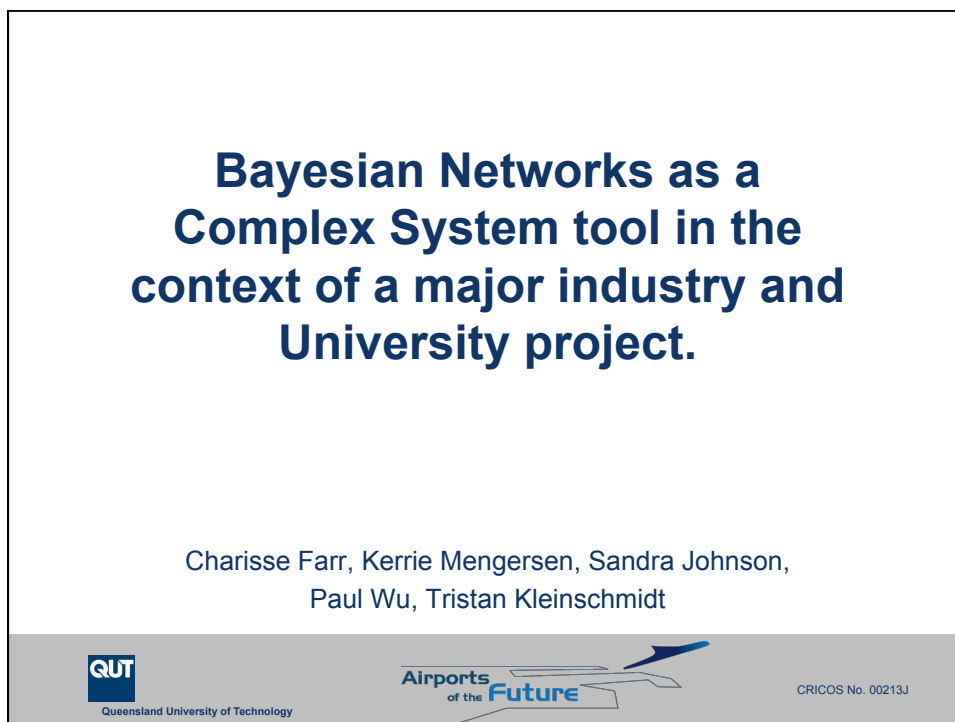
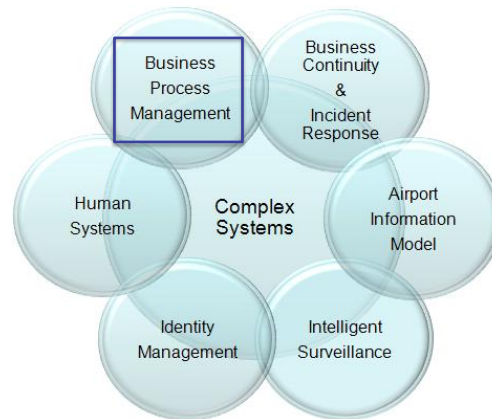


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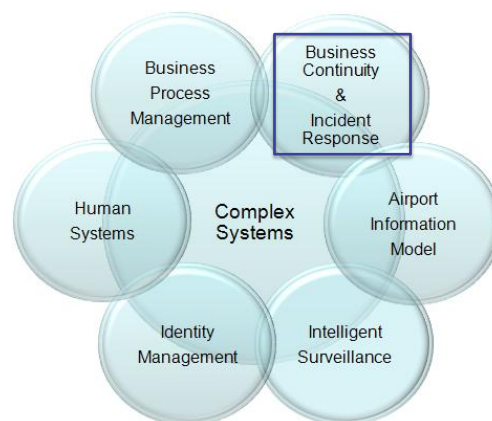


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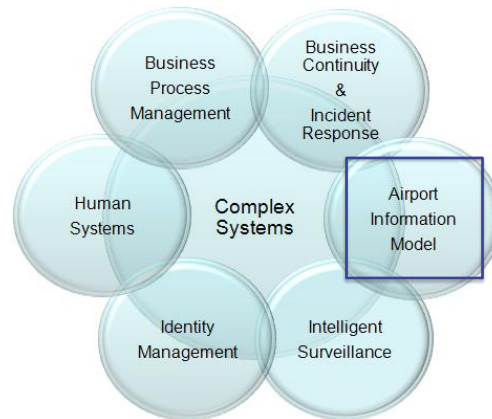


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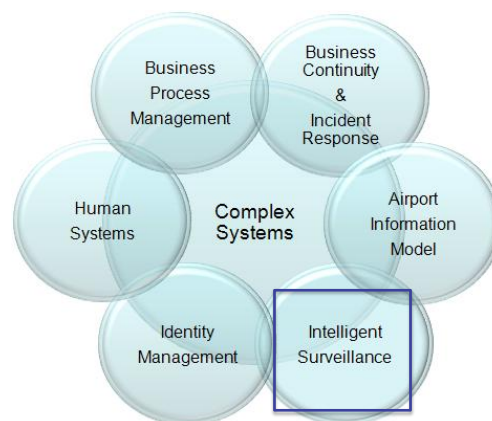


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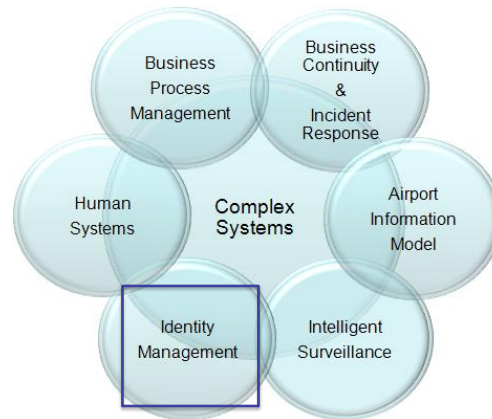


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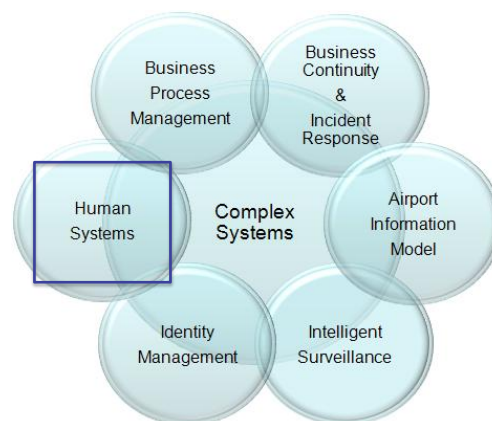


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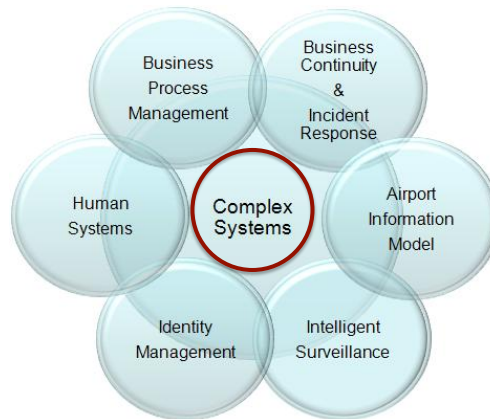


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Complex Systems



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Complex Systems

- Projects:
 - Inbound Passenger Process
 - Outbound Process
 - Airports talking to Airports
 - Concept of Operations (CONOPS)
 - Wayfinding
- Approaches:
 - Agent Based Models
 - Fuzzy Models
 - Bayesian Networks



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Wayfinding & Bayesian Networks

Wayfinding: *the process of finding your way to a destination in a familiar or unfamiliar environment.*

- Spatial and temporal problem solving
 - Decision making
 - Decision executing
 - Information processing



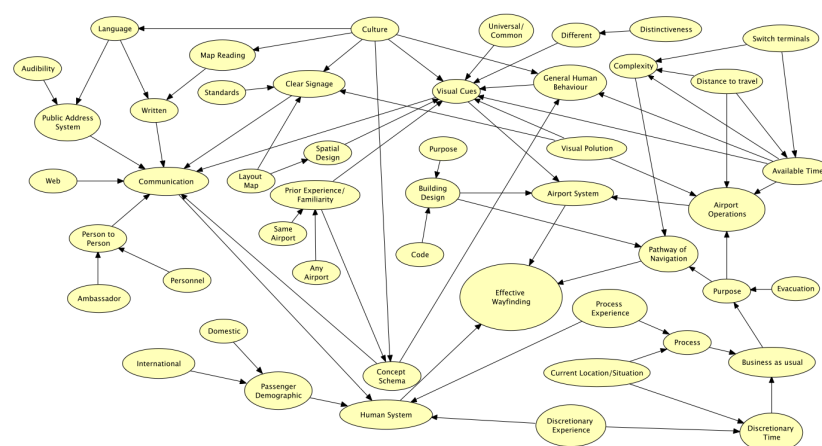
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Wayfinding BN

Initial BN:



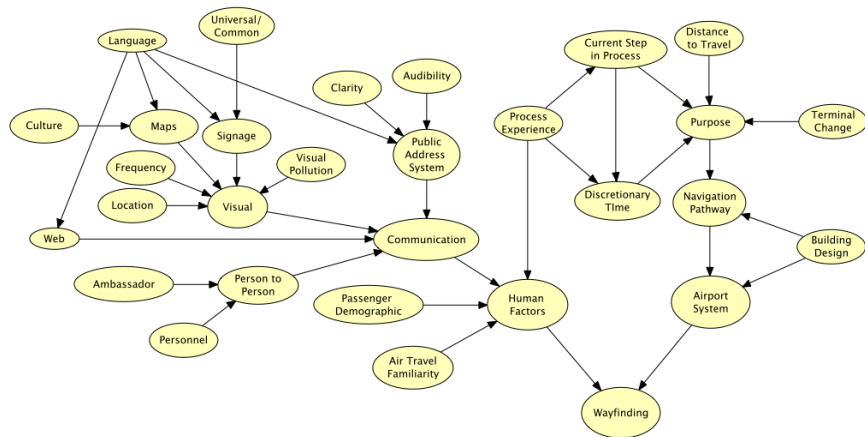
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Wayfinding BN

Consolidated BN:

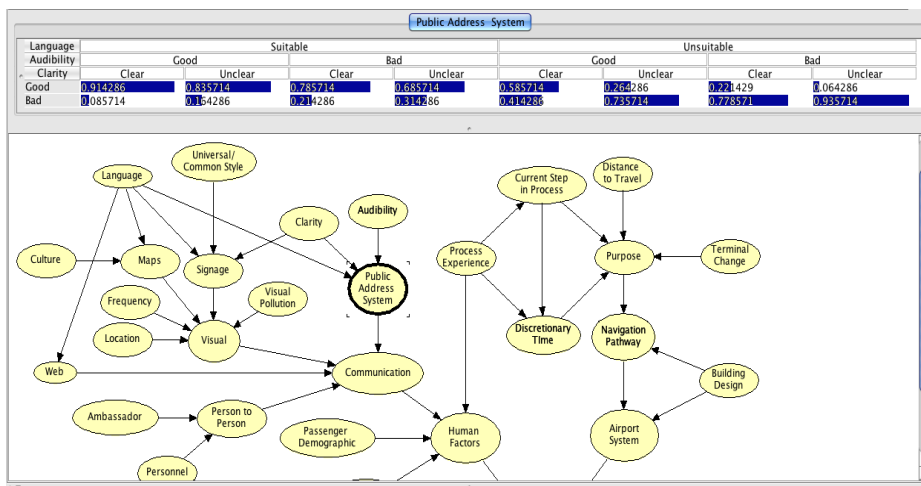


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Sample CPT from Wayfinding BN

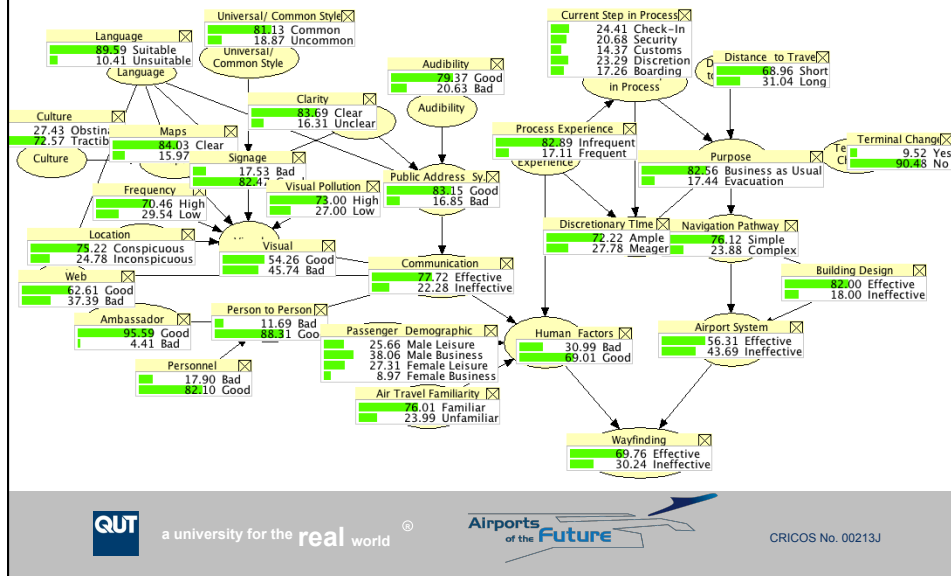


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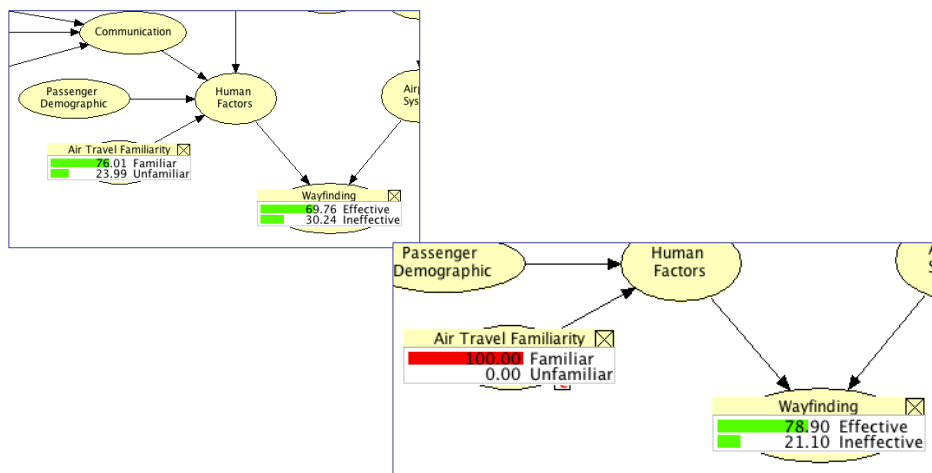


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Overall Wayfinding Probabilities



Air Travel Familiarity and Wayfinding



5 Step Process

1. Focus group discussion, conceptual map formation
2. Conceptual map consolidation and quantification from literature
3. Discussion with expert groups
4. Evaluation of model with focus groups
5. Review, revise, present



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Bells and Whistles

- OOBN
- DOOBN
- Uncertainty
- Combining different expert opinions
- Combining different models



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